AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1-30. (canceled).

31. (previously presented) An isolated monoclonal antibody MJ-170 produced by hybridoma cell line MJ-170 on deposit with the American Type Culture Collection (ATCC) as accession number PTA-5286.

32. (previously presented) An isolated monoclonal antibody MJ-171 produced by hybridoma cell line MJ-171 on deposit with the ATCC as accession number PTA-5287.

33. (previously presented) An isolated monoclonal antibody MJ-172 produced by hybridoma cell line MJ-172 on deposit with the ATCC as accession number PTA-5288.

34. (previously presented) An isolated monoclonal antibody MJ-173 produced by hybridoma cell line MJ-173 on deposit with the ATCC as accession number PTA-5302.

35. (previously presented) A hybridoma cell line MJ-170 on deposit with the ATCC as accession number PTA-5286.

36. (previously presented) A hybridoma cell line MJ-171 on deposit with the ATCC as accession number PTA-5287.

37. (previously presented) A hybridoma cell line MJ-172 on deposit with the ATCC as accession number PTA-5288.

38. (previously presented) A hybridoma cell line MJ-173 on deposit with the ATCC as accession number PTA-5302.

39. (canceled).

40. (currently amended) An ~~A conjugate comprising an~~ antibody of claim 31, 32, 33 or 34, wherein said antibody is covalently linked ~~attached~~ to a cytotoxic agent or a prodrug of a cytotoxic agent.

41. (currently amended) The antibody ~~conjugate~~ of claim 40, wherein said cytotoxic agent is a small drug molecule.

42. (currently amended) The antibody ~~conjugate~~ of claim 40, wherein said cytotoxic agent is a maytansinoid, a taxoid, or a CC-1065 analog.

43. (original) A composition comprising an antibody of claim 31, 32, 33 or 34 and a pharmaceutically acceptable carrier.

44. (currently amended) A composition comprising the antibody ~~conjugate~~ of claim 40 and a pharmaceutically acceptable carrier.

45. (withdrawn - currently amended) A method of treating a subject having a cancer ~~in need thereof~~, comprising administering to a ~~said~~ subject having a cancer a therapeutically ~~an~~ effective amount of the composition of claim 43.

46. (withdrawn - currently amended) A method of treating a subject having a cancer ~~in need thereof~~, comprising administering to a ~~said~~ subject having a cancer a therapeutically ~~an~~ effective amount of the composition of claim 44.

47-48. (canceled).

49. (withdrawn - currently amended) The method of claim 45~~47~~, wherein said cancer is a cancer wherein Muc1 or Muc16 is overexpressed.

50. (withdrawn - currently amended) The method of claim 46~~48~~, wherein said cancer is a cancer wherein Muc1 or Muc16 is overexpressed.

51. (new) The method of claim 45, wherein said cancer is ovarian cancer or breast cancer.

52. (new) The method of claim 46, wherein said cancer is ovarian cancer or breast cancer.

53. (new) An isolated antibody that specifically binds to a Muc1 peptide selected from the group consisting of:

a) QLTLAFREGTINVHDVETQFN (SEQ ID NO:8);

b) QYKTEAASRYNLTISDVSVSD (SEQ ID NO:9);

c) FLQIYKQGGFLGLSNIKFRPG (SEQ ID NO:10); and

d) VPFPFSAQSGAGVPGWGIA (SEQ ID NO:12).

54. (new) An isolated antibody that specifically binds to a Muc16 peptide selected from the group consisting of:

a) SSVLVDGYSPNRNEPLTGNS (SEQ ID NO:14);

b) TNYQRNKRNIEDALNQLFRN (SEQ ID NO:15);

c) FRNSSIKSYFSDCQVSTFRSV (SEQ ID NO:16);

d) SVPNRHHTGVDSLCNFSPLARRV (SEQ ID NO:17); and

e) DRVAIYEEFLRMTRNGTQLQNFTLDRSS (SEQ ID NO:18).

55. (new) The antibody of claim 53 or 54, wherein said antibody is selected from the group consisting of a monoclonal antibody, a recombinant antibody, a fragment of a recombinant antibody, a humanized antibody, and an antibody displayed upon the surface of a phage.

56. (new) The antibody of claim 53 or 54, wherein said antibody is covalently linked to a cytotoxic agent or a prodrug of a cytotoxic agent.

57. (new) The antibody of claim 56, wherein said cytotoxic agent is a small drug molecule.

58. (new) The antibody of claim 56, wherein said cytotoxic agent is a maytansinoid, taxoid, or CC-1065 analog.

59. (new) A composition comprising the antibody of claim 53 or 54 and a pharmaceutically acceptable carrier.

60. (new) A composition comprising the antibody of claim 56 and a pharmaceutically acceptable carrier.

61. (new) A method of treating a subject having a cancer, comprising administering to a subject having a cancer a therapeutically effective amount of the composition of claim 59.

62. (new) A method of treating a subject having a cancer, comprising administering to a subject having a cancer a therapeutically effective amount of the composition of claim 60.

63. (new) The method of claim 61, wherein said cancer is a cancer wherein Muc1 or Muc16 is overexpressed.

64. (new) The method of claim 62, wherein said cancer is a cancer wherein Muc1 or Muc16 is overexpressed.

65. (new) The method of claim 61 or 62, wherein said cancer is ovarian cancer or breast cancer.

66. (new) A method of screening a subject for cancer, comprising:

(a) measuring the amount of Muc1 in a biological sample obtained from a subject using the antibody of claim 53; and

(b) comparing the amount of Muc1 measured in (a) to the amount of Muc1 in a cancerous and a non-cancerous control, thereby screening a subject for cancer.

67. (new) A method of screening a subject for cancer, comprising:

(a) measuring the amount of Muc16 in a biological sample obtained from a subject using the antibody of claim 54; and

(b) comparing the amount of Muc16 measured in (a) to the amount of Muc16 in a cancerous and a non-cancerous control, thereby screening a subject for cancer.

68. (new) The method of claim 66 or 67, wherein said cancer is ovarian cancer or breast cancer.

69. (new) An antibody that binds the same epitope as an antibody selected from the group consisting of (a) antibody MJ-170 produced by hybridoma cell line MJ-170 on deposit with ATCC as accession number PTA-5286, (b) antibody MJ-171 produced by hybridoma cell line MJ-171 on deposit with ATCC as accession number PTA-5287, (c) antibody MJ-172 produced by hybridoma cell line MJ-172 on deposit with ATCC as accession number PTA-5288, and (d) antibody MJ-173 produced by hybridoma cell line MJ-173 on deposit with ATCC as accession number PTA-5302.

70. (new) The antibody of claim 69, wherein said antibody is selected from the group consisting of a monoclonal antibody, a recombinant antibody, a fragment of a recombinant antibody, a humanized antibody, and an antibody displayed upon the surface of a phage.

71. (new) A hybridoma that produces an antibody that specifically binds to a MUC1 peptide selected from the group consisting of:

a) QLTLAFREGTINVHDVETQFN (SEQ ID NO:8);

b) QYKTEAASRYNLTISDVSVSD (SEQ ID NO:9);

c) FLQIYKQGGFLGLSNIKFRPG (SEQ ID NO:10); and

d) VPFPFSAQSGAGVPGWGIA (SEQ ID NO:12).

72. (new) A hybridoma that produces an antibody that specifically binds to a MUC16 peptide selected from the group consisting of:

a) SSVLVDGYSPNRNEPLTGNS (SEQ ID NO:14);

b) TNYQRNKRNIEDALNQLFRN (SEQ ID NO:15);

c) FRNSSIKSYFSDCQVSTFRSV (SEQ ID NO:16);

d) SVPNRHHTGVDSLCNFSPLARRV (SEQ ID NO:17); and

e) DRVAIYEEFLRMTRNGTQLQNFTLDRSS (SEQ ID NO:18).